

# STIC Search Report

EIC 1700

STIC Database Tracking Number: 182905

**TO:** Eisa Elhilo  
**Location:** REM 9A60  
**Art Unit :** 1751  
**March 22, 2006**

**Case Serial Number:** 10/807162

**From:** Les Henderson  
**Location:** EIC 1700  
**REM 4B28 / 4A30**  
**Phone:** 571-272-2538

**Leslie.henderson@uspto.gov**

## Search Notes



# STIC Search Results Feedback Form

**EIC17000**

Questions about the scope or the results of the search? Contact *the EIC searcher or contact:*

**Kathleen Fuller, EIC 1700 Team Leader  
571/272-2505 REMSEN 4B28**

## **Voluntary Results Feedback Form**

- *I am an examiner in Workgroup:*  *Example: 1713*
- *Relevant prior art found, search results used as follows:*
  - 102 rejection
  - 103 rejection
  - Cited as being of interest.
  - Helped examiner better understand the invention.
  - Helped examiner better understand the state of the art in their technology.

*Types of relevant prior art found:*

- Foreign Patent(s)
- Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art not found:*
  - Results verified the lack of relevant prior art (helped determine patentability).
  - Results were not useful in determining patentability or understanding the invention.

**Comments:**

**Drop off or send completed forms to EIC1700 REMSEN 4B28**

=> d his

(FILE 'HOME' ENTERED AT 14:38:21 ON 22 MAR 2006)

FILE 'HCAPLUS' ENTERED AT 14:38:33 ON 22 MAR 2006  
E US20050066451/PN

L1 1 S US20050066451/PN  
SEL RN

L2 FILE 'REGISTRY' ENTERED AT 14:39:22 ON 22 MAR 2006  
47 S E1-E47

L3 FILE 'LREGISTRY' ENTERED AT 14:44:12 ON 22 MAR 2006  
STR

L4 FILE 'REGISTRY' ENTERED AT 14:48:45 ON 22 MAR 2006  
50 S L3

L5 FILE 'LREGISTRY' ENTERED AT 14:49:22 ON 22 MAR 2006  
STR L3

L6 FILE 'REGISTRY' ENTERED AT 14:49:56 ON 22 MAR 2006  
50 S L5

L7 FILE 'LREGISTRY' ENTERED AT 14:54:16 ON 22 MAR 2006  
STR L5

L8 FILE 'REGISTRY' ENTERED AT 14:55:06 ON 22 MAR 2006  
38 S L7

L9 846 S L7 FUL  
SAV L9 ELH162/A

L10 34 S L2 AND L9

L11 FILE 'LREGISTRY' ENTERED AT 15:02:14 ON 22 MAR 2006  
STR L7

L12 FILE 'REGISTRY' ENTERED AT 15:04:12 ON 22 MAR 2006  
9 S L11 SSS SAM SUB=L9

L13 207 S L11 SSS FUL SUB=L9  
SAV L13 ELH162A/A

L14 34 S L13 AND L2

L15 FILE 'HCAPLUS' ENTERED AT 15:06:56 ON 22 MAR 2006  
1 S L14

L16 63 S L13

L17 454 S L9

L18 1 S L15 AND L16

L19 7778 S HAIR?(2N)(DYE? OR DY? OR COLOR? OR COLOUR?)

L20 3 S L16 AND L19

L21 4 S L17 AND L19

L22 2019 S KERA?(2N)(FIBER OR FIBRE)

L23 3 S L16 AND L22

L24 3 S L22 AND L17

L25 162443 S COSMET?/SC, SX

L26 3 S L25 AND L16

L27 5 S L25 AND L17

L28 FILE 'LREGISTRY' ENTERED AT 15:14:07 ON 22 MAR 2006  
STR L11

L29 FILE 'REGISTRY' ENTERED AT 15:19:23 ON 22 MAR 2006  
8 S L28 SSS SAM SUB=L9

L30 243 S L28 SSS FUL SUB=L9  
SAV L30 ELH162B/A

L31 8 S L28 SSS SAM SUB=L13

L32 199 S L28 SSS FUL SUB=L13

L33 34 S L32 AND L2  
 L34 34 S L30 AND L2  
 SAV L32 ELH162C/A

FILE 'HCAPLUS' ENTERED AT 15:23:31 ON 22 MAR 2006

L35 86 S L30  
 L36 86 S L35  
 L37 86 S L35 OR L36  
 L38 3 S L37 AND (L19 OR L22 OR L25)  
 L39 1176472 S DY?  
 L40 7 S L37 AND L39  
 L41 4 S L40 AND (DYSTROPH? OR DYSFUNC? OR DYSLIP?)  
 L42 3 S L40 NOT L41  
 L43 5 S L20 OR L23 OR L24 OR L26 OR L27 OR L38 OR L42  
 L44 60 S L16 NOT L43

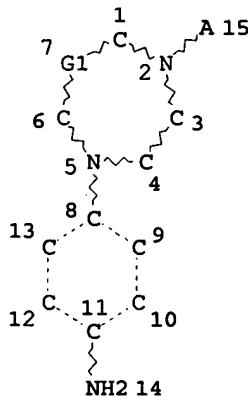
FILE 'CAOLD' ENTERED AT 15:33:29 ON 22 MAR 2006

L45 1 S L16  
 L46 2 S L30  
 L47 6 S L9  
 L48 6 S L45-L47

FILE 'HCAPLUS' ENTERED AT 15:39:05 ON 22 MAR 2006

L49 161083 S DYE?/SC,SX  
 L50 1 S L49 AND L37  
 L51 1 S L50 AND L17  
 L52 5 S L43 OR L50 OR L51

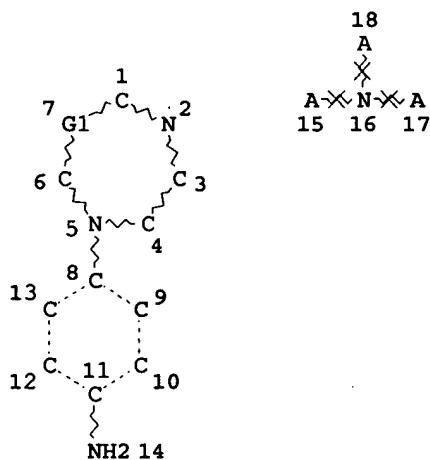
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 L7 STR



REP G1=(0-1) C  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE  
 L9 846 SEA FILE=REGISTRY SSS FUL L7  
 L11 STR



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NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

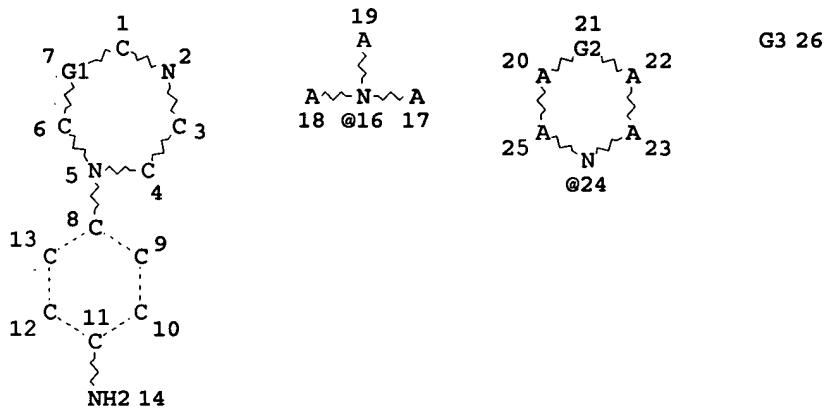
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE

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L16	63	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L13
L17	454	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L9
L19	7778	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	HAIR? (2A) (DYE? OR DY? OR COLOR? OR COLOUR?)
L20	3	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L16 AND L19
L22	2019	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	KERA? (2A) (FIBER OR FIBRE)
L23	3	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L16 AND L22
L24	3	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L22 AND L17
L25	162443	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	COSMET?/SC, SX
L26	3	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L25 AND L16
L27	5	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L25 AND L17
L28	STR				



REP G1=(0-1) C

REP G2=(0-1) A

VAR G3=16/24

## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 25

## STEREO ATTRIBUTES: NONE

L30	243	SEA FILE=REGISTRY	SUB=L9	SSS	FUL	L28
L35	86	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L30	
L36	86	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L30	
L37	86	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L35	OR L36
L38	3	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L37	AND (L19 OR L22 OR L25)
L39	1176472	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	DY?	
L40	7	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L37	AND L39
L41	4	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L40	AND (DYSTROPH? OR DYSFUNC? OR DYSLIP?)
L42	3	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L40	NOT L41
L43	5	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L20	OR L23 OR L24 OR L26 OR L27 OR L38 OR L42
L49	161083	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	DYE?/SC,SX	
L50	1	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L49	AND L37
L51	1	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L50	AND L17
L52	5	SEA FILE=HCAPLUS	ABB=ON	PLU=ON	L43	OR L50 OR L51

=> d 152 1-5 ibib abs hitstr hitind

L52 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:1079846 HCAPLUS  
 DOCUMENT NUMBER: 142:62280  
 TITLE: p-Phenylenediamine derivatives comprising a diazacycloheptane ring as hair dyes  
 INVENTOR(S): Sabelle, Stephane; Leduc, Madeleine; Ramos, Stanbury Laure  
 PATENT ASSIGNEE(S): L'Oreal, Fr.  
 SOURCE: Fr. Demande, 38 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2856059	A1	20041217	FR 2003-7165	2003 0613
FR 2856059	B1	20051028		
WO 2004111062	A1	20041223	WO 2004-EP7192	2004 0611

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,  
 CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,  
 ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,  
 KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
 MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,  
 PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,  
 TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,  
 CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,  
 MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,

CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 PRIORITY APPLN. INFO.: FR 2003-7165

A

2003  
 0613

OTHER SOURCE(S): MARPAT 142:62280

AB The invention relates to a p-phenylenediamine derivative comprising a diazacycloheptane ring with silyl groups for hair dyeing. Thus, 4-{4-[3-(trimethylsilyl)propyl]-1,4-diazepan-1-yl}phenylamine-HCl (I) was prepared by the reaction of 1-(4-nitrophenyl)-1,4-diazepan with 3-(trimethylsilyl)propyl chloride followed by Pd/C reduction. A formulation contained 10-3 mol I and 10-3 2-methyl-5-aminophenol in addition to the standard hair dye formulation components.

IT 808110-78-3 808110-79-4 808110-80-7

808110-81-8 808110-82-9 808110-83-0

808110-84-1 808110-85-2 808110-86-3

808110-87-4 808110-88-5 808110-89-6

808110-90-9 808110-91-0 808110-92-1

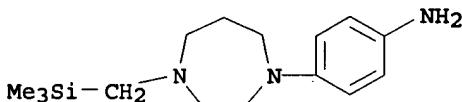
808110-93-2 808110-94-3 808110-95-4

808110-96-5 808110-97-6 808110-98-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (phenylenediamine derivs. comprising diazacycloheptane ring as  
 hair dyes)

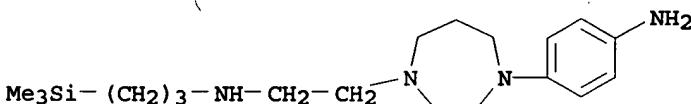
RN 808110-78-3 HCPLUS

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 diazepin-1-yl]- (9CI) (CA INDEX NAME)



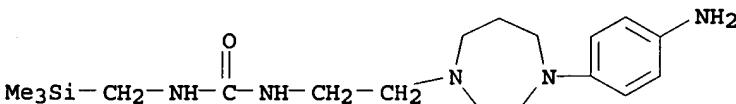
RN 808110-79-4 HCPLUS

CN 1H-1,4-Diazepine-1-ethanamine, 4-(4-aminophenyl)hexahydro-N-[3-(trimethylsilyl)propyl]- (9CI) (CA INDEX NAME)



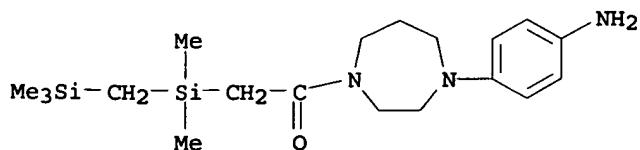
RN 808110-80-7 HCPLUS

CN Urea, N-[2-[4-(4-aminophenyl)hexahydro-1H-1,4-diazepin-1-yl]ethyl]-N'-(trimethylsilyl)methyl- (9CI) (CA INDEX NAME)

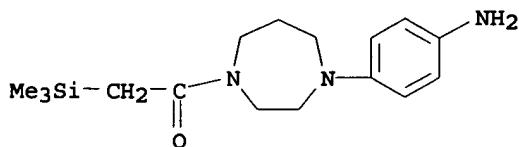


RN 808110-81-8 HCPLUS

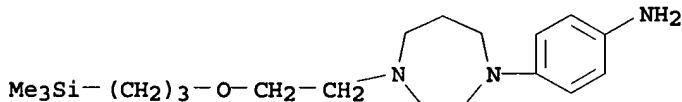
CN 1H-1,4-Diazepine, 1-(4-aminophenyl)-4-[(dimethyl[(trimethylsilyl)methyl]silyl)acetyl]hexahydro- (9CI)  
 (CA INDEX NAME)



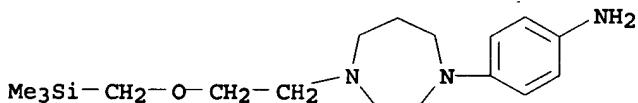
RN 808110-82-9 HCAPLUS  
 CN 1H-1,4-Diazepine, 1-(4-aminophenyl)hexahydro-4-[(trimethylsilyl)acetyl]- (9CI) (CA INDEX NAME)



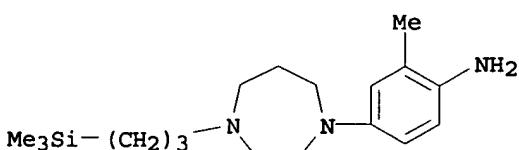
RN 808110-83-0 HCAPLUS  
 CN Benzenamine, 4-[hexahydro-4-[2-[3-(trimethylsilyl)propoxy]ethyl]-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)



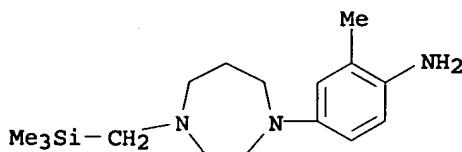
RN 808110-84-1 HCAPLUS  
 CN Benzenamine, 4-[hexahydro-4-[2-[(trimethylsilyl)methoxy]ethyl]-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)



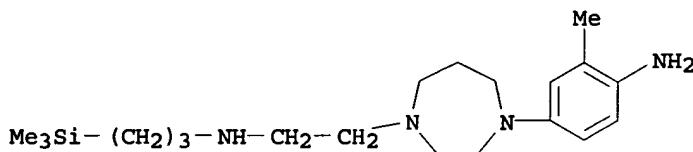
RN 808110-85-2 HCAPLUS  
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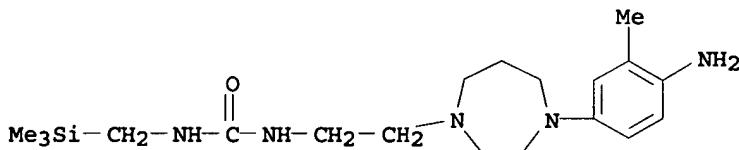
RN 808110-86-3 HCAPLUS  
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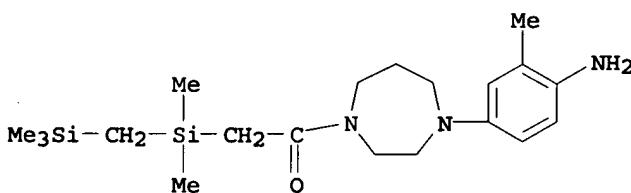
RN 808110-87-4 HCAPLUS  
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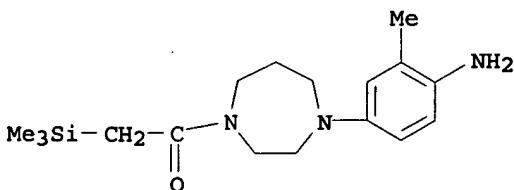
RN 808110-88-5 HCAPLUS  
 CN Urea, N-[2-[4-(4-amino-3-methylphenyl)hexahydro-1H-1,4-diazepin-1-yl]ethyl]-N'-(trimethylsilyl)methyl]- (9CI) (CA INDEX NAME)



RN 808110-89-6 HCAPLUS  
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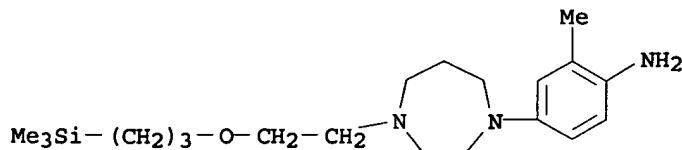


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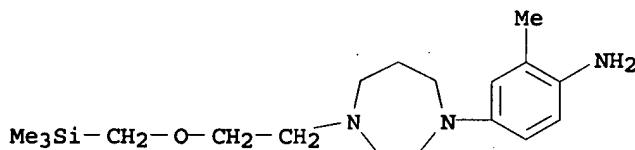
RN 808110-91-0 HCAPLUS

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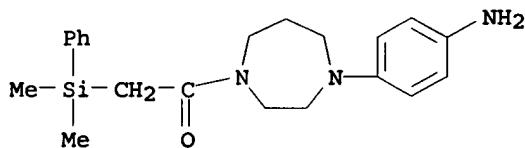
RN 808110-92-1 HCAPLUS

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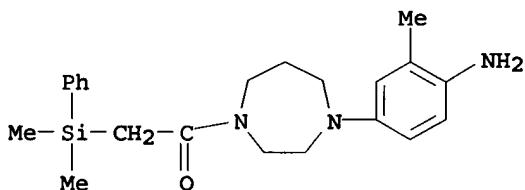
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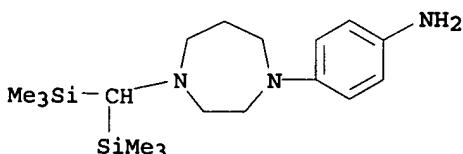
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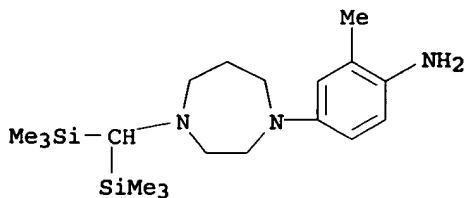


RN 808110-95-4 HCAPLUS

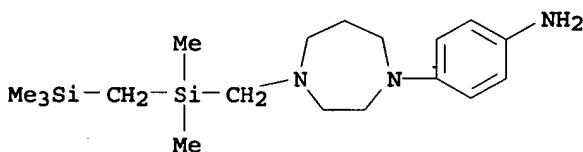
CN Benzenamine, 4-[4-[(bis(trimethylsilyl)methyl)hexahydro-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)



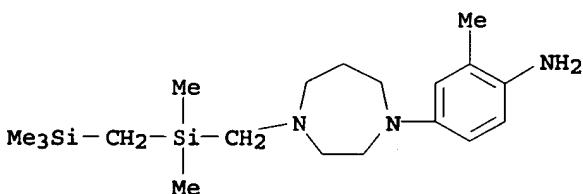
RN 808110-96-5 HCPLUS  
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RN 808110-97-6 HCPLUS  
 CN Benzenamine, 4-[4-[[dimethyl[(trimethylsilyl)methyl]silyl]methyl]hexahydro-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)

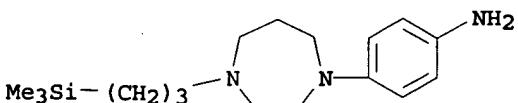


RN 808110-98-7 HCPLUS  
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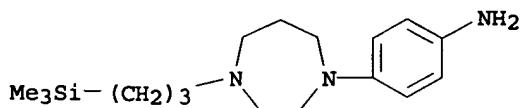


IT 808110-77-2P 808111-00-4P  
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (phenylenediamine derivs. comprising diazacycloheptane ring as hair dyes)

RN 808110-77-2 HCPLUS  
 CN Benzenamine, 4-[hexahydro-4-[3-(trimethylsilyl)propyl]-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)



RN 808111-00-4 HCPLUS  
 CN Benzenamine, 4-[hexahydro-4-[3-(trimethylsilyl)propyl]-1H-1,4-diazepin-1-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IC ICM C07D243-08  
 ICS A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 95-54-5D, o-Phenylenediamine, derivs. 95-55-6D, o-Aminophenol, derivs. 108-45-2D, m-Phenylenediamine, derivs. 108-46-3, Resorcinol, biological studies 108-46-3D, Resorcinol, derivs. 123-30-8D, p-Aminophenol, derivs. 124-43-6 591-27-5D, m-Aminophenol, derivs. 2380-86-1, 6-Hydroxyindole 2835-95-2 7722-84-1, Hydrogen peroxide, biological studies 9035-73-8, Oxidase 16867-03-1, 2-Amino-3-hydroxypyridine 30569-52-9 66422-95-5 80419-48-3 808110-78-3 808110-79-4 808110-80-7 808110-81-8 808110-82-9 808110-83-0 808110-84-1 808110-85-2 808110-86-3 808110-87-4 808110-88-5 808110-89-6 808110-90-9 808110-91-0 808110-92-1 808110-93-2 808110-94-3 808110-95-4 808110-96-5 808110-97-6 808110-98-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (phenylenediamine derivs. comprising diazacycloheptane ring as  
 hair dyes)

IT 808110-77-2P 808111-00-4P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (phenylenediamine derivs. comprising diazacycloheptane ring as  
 hair dyes)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

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ACCESSION NUMBER: 2004:796300 HCAPLUS

DOCUMENT NUMBER: 141:295850

TITLE: Preparation of p-phenylenediamines with a  
 cyclic diaza group substituted by a cationic  
 radical, and their use for dyeing  
 keratinic fibers

INVENTOR(S): Sabelle, Stephane; Genet, Alain; Leduc,  
 Madeleine

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 35 pp.

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

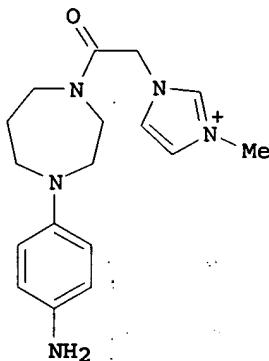
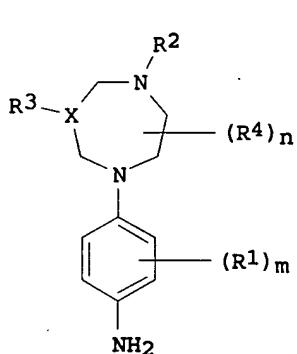
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1462445	A1	20040929	EP 2004-290723	2004 0317

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,  
EE, HU, PL, SK, HR

FR 2852955	A1	20041001	FR 2003-3548	
				2003
				0324
JP 2004292448	A2	20041021	JP 2004-85683	
				2004
				0323
US 2005066451	A1	20050331	US 2004-807162	
				2004
				0324
PRIORITY APPLN. INFO.:			FR 2003-3548	A
				2003
				0324
			US 2003-467123P	P
				2003
				0502

OTHER SOURCE(S) : MARPAT 141:295850  
GI



AB Title compds. I [wherein X = (CH<sub>2</sub>)<sub>q</sub>; m = 0-4; when m ≥ 2, R<sub>1</sub> can be identical or different; n = 0-4; when n ≥ 2, R<sub>4</sub> can be identical or different; q = 0-1; R<sub>1</sub> = Z, halo, (un)saturated aliphatic or alicyclic hydrocarbyl with at least one carbon replaced by O, N, Si, S, SO<sub>2</sub>; R<sub>2</sub> = Z; R<sub>3</sub> = alkenyl, alkynyl, hydroxy/alkoxy/hydroxyalkoxy/amino/carboxy/carbamoyl/alkyl, OH, alkoxy, alkylcarbonyl, monoalkyl/dialkyl/amino, etc.; R<sub>4</sub> = alkenyl, alkynyl, hydroxy/alkoxy/hydroxyalkoxy//amino/carboxy/carbamoyl/alkyl, alkylcarbonyl, CO<sub>2</sub>H, carbamoyl, etc.; and their addition salts] were prepared as oxidation bases for dyeing keratinous fibers, in particular human hair

fibers. For example, II•Cl•HCl was prepared by acylation of 1-(4-nitrophenyl)-1,4-diazepane with chloroacetyl chloride, amination of the chloride with 1-methyl-1H-imidazole, hydrogenation of the nitrophenyl intermediate over Pd/C, followed by acidulation with HCl. Formulations of II•Cl•HCl in acidic medium gave blue-violet and violet-gray shades.

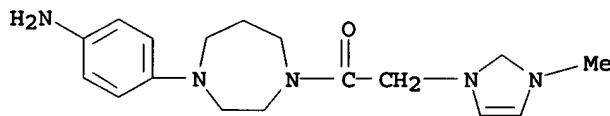
IT 765295-81-6P, 3-[2-[4-(4-Aminophenyl)-1,4-diazepan-1-yl]-2-oxoethyl]-1-methyl-3H-imidazol-1-ium chloride dihydrochloride  
765295-83-8P 765295-84-9P 765295-85-0P  
765295-86-1P 765295-87-2P 765295-88-3P  
765295-89-4P 765295-90-7P 765295-91-8P  
765295-92-9P 765295-93-0P 765295-94-1P  
765295-95-2P 765295-96-3P 765295-97-4P

765295-98-5P 765295-99-6P 765296-00-2P  
 765296-01-3P 765296-02-4P 765296-03-5P  
 765296-04-6P 765296-05-7P 765296-06-8P  
 765296-07-9P 765296-08-0P 765296-09-1P  
 765296-10-4P 765296-11-5P 765296-12-6P  
 765296-13-7P 765296-14-8P 765296-21-7P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (oxidation base for dyeing; preparation of p-phenylenediamines with a cyclic diaza group substituted by a cationic radical, and their use for dyeing keratinic fibers)

RN 765295-81-6 HCAPLUS

CN 1H-Imidazolium, 1-[2-[4-(4-aminophenyl)hexahydro-1H-1,4-diazepin-1-yl]-2-oxoethyl]-3-methyl-, chloride, dihydrochloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

● 2 HCl

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

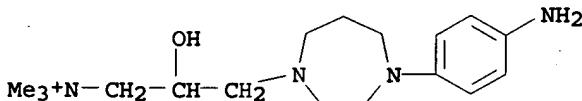
RN 765295-83-8 HCAPLUS

CN 1H-1,4-Diazepine-1-propanaminium, 4-(4-aminophenyl)hexahydro-β-hydroxy-N,N,N-trimethyl-, acetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 765295-82-7

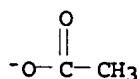
CMF C17 H31 N4 O



CM 2

CRN 71-50-1

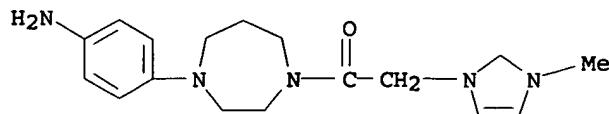
CMF C2 H3 O2



RN 765295-84-9 HCAPLUS

CN 1H-Imidazolium, 1-[2-[4-(4-aminophenyl)hexahydro-1H-1,4-diazepin-1-

yl]-2-oxoethyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

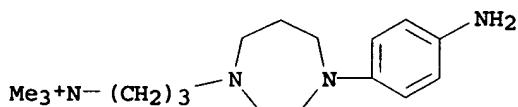


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 765295-85-0 HCAPLUS

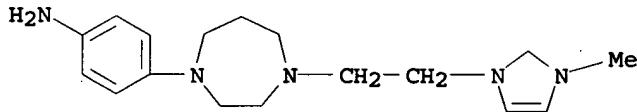
CN 1H-1,4-Diazepine-1-propanaminium, 4-(4-aminophenyl)hexahydro-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 765295-86-1 HCAPLUS

CN 1H-Imidazolium, 1-[2-[4-(4-aminophenyl)hexahydro-1H-1,4-diazepin-1-yl]ethyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

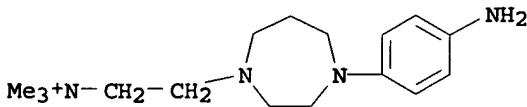


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 765295-87-2 HCAPLUS

CN 1H-1,4-Diazepine-1-ethanaminium, 4-(4-aminophenyl)hexahydro-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

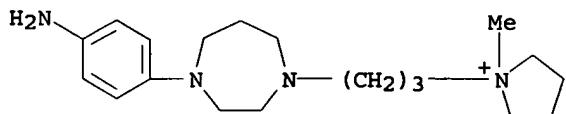


● Cl<sup>-</sup>

RN 765295-88-3 HCAPLUS

CN Pyrrolidinium, 1-[3-[4-(4-aminophenyl)hexahydro-1H-1,4-diazepin-1-

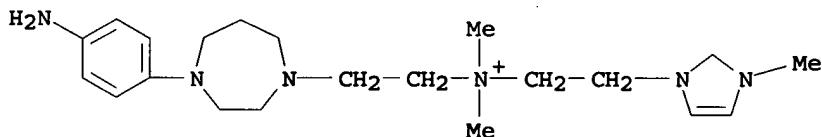
yl]propyl]-1-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 765295-89-4 HCAPLUS

CN 1H-Imidazolium, 1-[2-[(2-[(4-aminophenyl)hexahydro-1H-1,4-diazepin-1-yl]ethyl)dimethylammonio]ethyl]-3-methyl-, dichloride (9CI) (CA INDEX NAME)

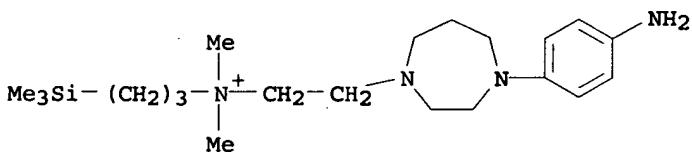


● 2 Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 765295-90-7 HCAPLUS

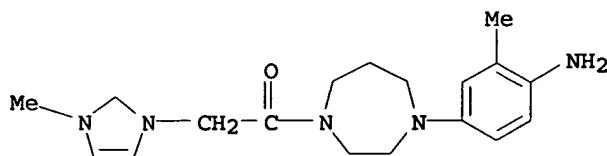
CN 1H-1,4-Diazepine-1-ethanaminium, 4-(4-aminophenyl)hexahydro-N,N-dimethyl-N-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 765295-91-8 HCAPLUS

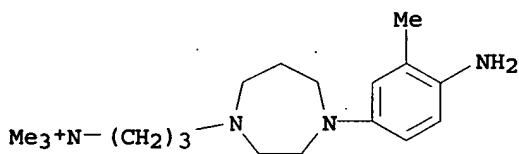
CN 1H-Imidazolium, 1-[2-[(4-(4-amino-3-methylphenyl)hexahydro-1H-1,4-diazepin-1-yl)-2-oxoethyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

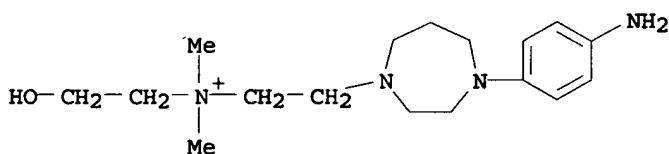
RN 765295-92-9 HCPLUS

CN 1H-1,4-Diazepine-1-propanaminium, 4-(4-amino-3-methylphenyl)hexahydro-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

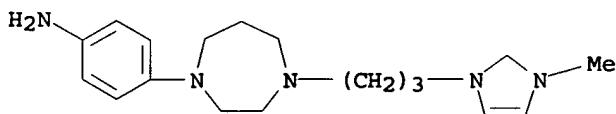
RN 765295-93-0 HCPLUS

CN 1H-1,4-Diazepine-1-ethanaminium, 4-(4-aminophenyl)hexahydro-N-(2-hydroxyethyl)-N,N-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 765295-94-1 HCPLUS

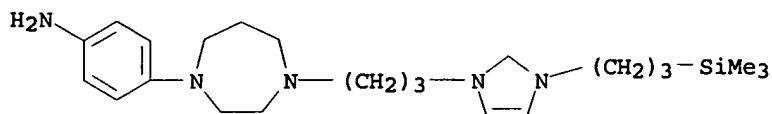
CN 1H-Imidazolium, 1-[3-[4-(4-aminophenyl)hexahydro-1H-1,4-diazepin-1-yl]propyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 765295-95-2 HCPLUS

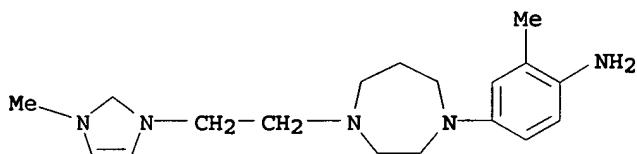
CN 1H-Imidazolium, 1-[3-[4-(4-aminophenyl)hexahydro-1H-1,4-diazepin-1-yl]propyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 765295-96-3 HCPLUS

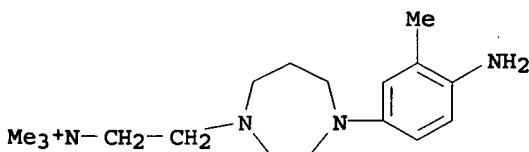
CN 1H-Imidazolium, 1-[2-[4-(4-amino-3-methylphenyl)hexahydro-1H-1,4-diazepin-1-yl]ethyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

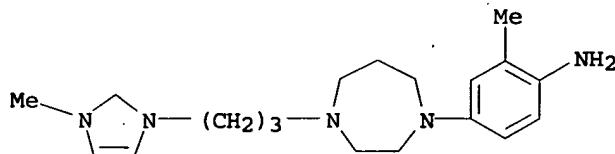
RN 765295-97-4 HCPLUS

CN 1H-1,4-Diazepine-1-ethanaminium, 4-(4-amino-3-methylphenyl)hexahydro-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 765295-98-5 HCPLUS

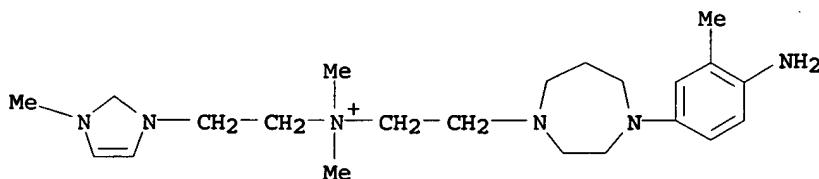
CN 1H-Imidazolium, 1-[3-[4-(4-amino-3-methylphenyl)hexahydro-1H-1,4-diazepin-1-yl]propyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 765295-99-6 HCPLUS

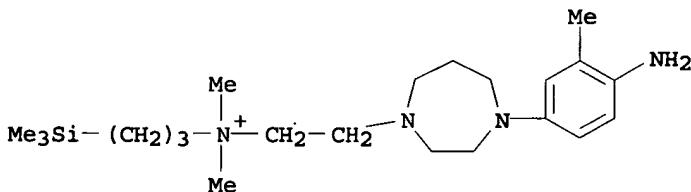
CN 1H-Imidazolium, 1-[2-[(2-[(4-amino-3-methylphenyl)hexahydro-1H-1,4-diazepin-1-yl]ethyl)dimethylammonio]ethyl]-3-methyl-, dichloride (9CI) (CA INDEX NAME)

● 2 Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

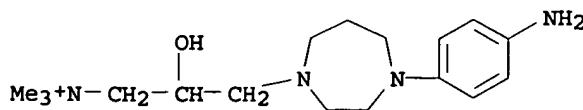
RN 765296-00-2 HCPLUS

CN 1H-1,4-Diazepine-1-ethanaminium, 4-(4-amino-3-methylphenyl)hexahydro-N,N-dimethyl-N-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

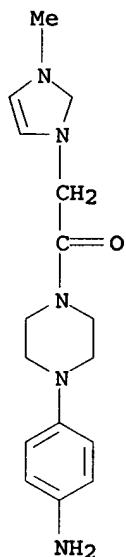
RN 765296-01-3 HCPLUS

CN 1H-1,4-Diazepine-1-propanaminium, 4-(4-aminophenyl)hexahydro-β-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 765296-02-4 HCAPLUS

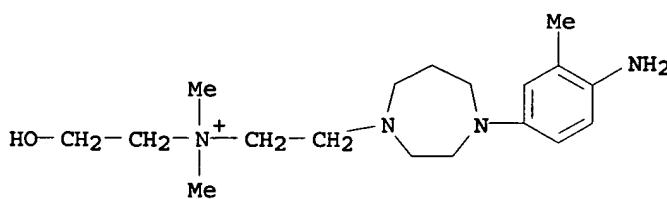
CN 1H-Imidazolium, 1-[2-[4-(4-aminophenyl)-1-piperazinyl]-2-oxoethyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

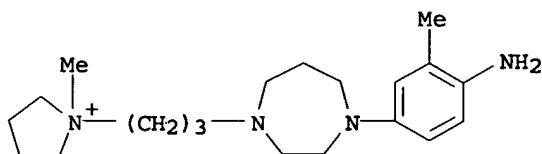
RN 765296-03-5 HCAPLUS

CN 1H-1,4-Diazepine-1-ethanaminium, 4-(4-amino-3-methylphenyl)hexahydro-N-(2-hydroxyethyl)-N,N-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

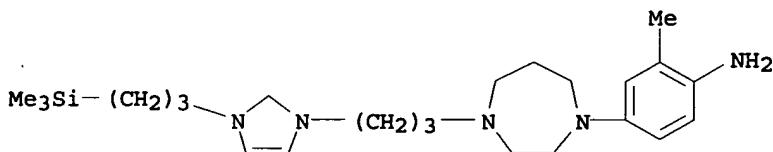
RN 765296-04-6 HCAPLUS

CN Pyrrolidinium, 1-[3-[4-(4-amino-3-methylphenyl)hexahydro-1H-1,4-diazepin-1-yl]propyl]-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 765296-05-7 HCPLUS

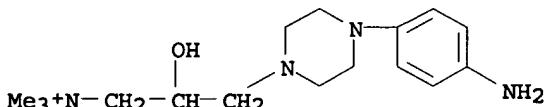
CN 1H-Imidazolium, 1-[3-[4-(4-amino-3-methylphenyl)hexahydro-1H-1,4-diazepin-1-yl]propyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

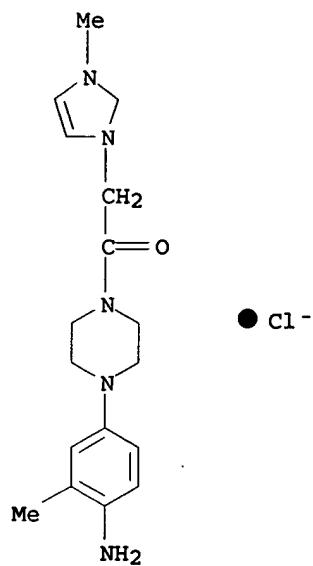
RN 765296-06-8 HCPLUS

CN 1-Piperazinepropanaminium, 4-(4-aminophenyl)-β-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

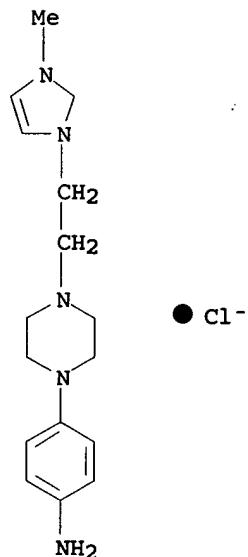
● Cl<sup>-</sup>

RN 765296-07-9 HCPLUS

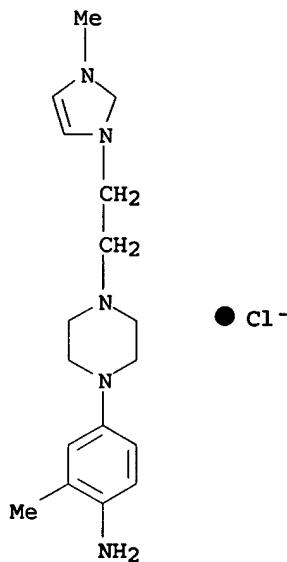
CN 1H-Imidazolium, 1-[2-[4-(4-amino-3-methylphenyl)-1-piperazinyl]-2-oxoethyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 765296-08-0 HCPLUS  
 CN 1H-Imidazolium, 1-[2-[4-(4-aminophenyl)-1-piperazinyl]ethyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



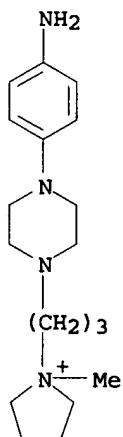
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 765296-09-1 HCPLUS  
 CN 1H-Imidazolium, 1-[2-[4-(4-amino-3-methylphenyl)-1-piperazinyl]ethyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 765296-10-4 HCPLUS

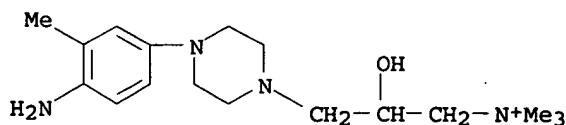
CN Pyrrolidinium, 1-[3-[4-(4-aminophenyl)-1-piperazinyl]propyl]-1-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl-

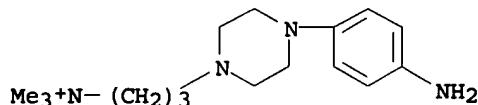
RN 765296-11-5 HCPLUS

CN 1-Piperazinepropanaminium, 4-(4-amino-3-methylphenyl)-β-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

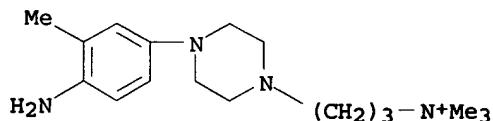
RN 765296-12-6 HCPLUS

CN 1-Piperazinepropanaminium, 4-(4-aminophenyl)-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

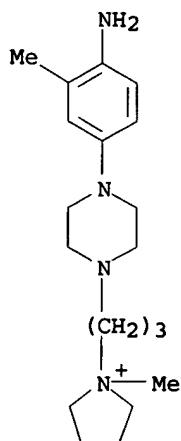
RN 765296-13-7 HCPLUS

CN 1-Piperazinepropanaminium, 4-(4-amino-3-methylphenyl)-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

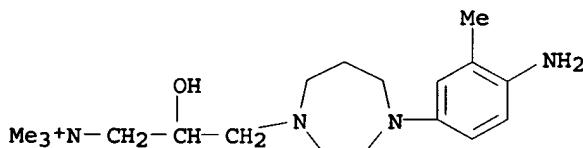
● Cl<sup>-</sup>

RN 765296-14-8 HCPLUS

CN Pyrrolidinium, 1-[3-[4-(4-amino-3-methylphenyl)-1-piperazinyl]propyl]-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 765296-21-7 HCPLUS  
 CN 1H-1,4-Diazepine-1-propanaminium, 4-(4-amino-3-methylphenyl)hexahydro-β-hydroxy-N,N,N-trimethyl-, chloride  
 (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

IC ICM C07D233-54  
 ICS C07D243-06; C07D295-12; C07D403-12; A61K007-13  
 CC 27-10 (Heterocyclic Compounds (One Hetero Atom))  
 Section cross-reference(s): 62  
 ST diazepan phenylenediamine prepn hair dye  
 keratin fiber  
 IT Bromates  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (oxidizing agents; alkali metal; preparation of p-phenylenediamines  
 with a cyclic diaza group substituted by a cationic radical,  
 and their use for dyeing keratinic  
 fibers)  
 IT Peroxy acids  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (oxidizing agents; preparation of p-phenylenediamines with a cyclic  
 diaza group substituted by a cationic radical, and their use  
 for dyeing keratinic fibers)  
 IT Hair preparations  
 Human  
 (preparation of p-phenylenediamines with a cyclic diaza group  
 substituted by a cationic radical, and their use for  
 dyeing keratinic fibers)

IT 2380-86-1, 1H-Indol-6-ol 2835-95-2, 2-Methyl-5-aminophenol  
 16867-03-1, 2-Aminopyridin-3-ol 54557-79-8, 3,6-Dimethyl-1H-pyrazolo[5,1-c]-[1,2,4]triazole 66422-95-5, 2-(2,4-Diaminophenoxy)ethanol dihydrochloride 80419-48-3, 3-Amino-2-chloro-6-methylphenol hydrochloride 765296-19-3, 2-(2,4-Diaminophenoxy)ethanol acetate dihydrochloride  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (coupling agent; preparation of p-phenylenediamines with a cyclic diaza group substituted by a cationic radical, and their use for dyeing keratinic fibers)

IT 765296-15-9P, 2-Chloro-1-[4-(4-nitrophenyl)-1,4-diazepan-1-yl]ethanone 765296-16-0P 765296-18-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; preparation of p-phenylenediamines with a cyclic diaza group substituted by a cationic radical, and their use for dyeing keratinic fibers)

IT 765295-81-6P, 3-[2-[4-(4-Aminophenyl)-1,4-diazepan-1-yl]-2-oxoethyl]-1-methyl-3H-imidazol-1-ium chloride dihydrochloride  
 765295-83-8P 765295-84-9P 765295-85-0P  
 765295-86-1P 765295-87-2P 765295-88-3P  
 765295-89-4P 765295-90-7P 765295-91-8P  
 765295-92-9P 765295-93-0P 765295-94-1P  
 765295-95-2P 765295-96-3P 765295-97-4P  
 765295-98-5P 765295-99-6P 765296-00-2P  
 765296-01-3P 765296-02-4P 765296-03-5P  
 765296-04-6P 765296-05-7P 765296-06-8P  
 765296-07-9P 765296-08-0P 765296-09-1P  
 765296-10-4P 765296-11-5P 765296-12-6P  
 765296-13-7P 765296-14-8P 765296-21-7P  
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (oxidation base for dyeing; preparation of p-phenylenediamines with a cyclic diaza group substituted by a cationic radical, and their use for dyeing keratinic fibers)

IT 616-47-7, 1-Methyl-1H-imidazole 34890-37-4,  
 Glycidyltrimethylammonium acetate 214124-83-1,  
 1-(4-Nitrophenyl)-1,4-diazepane  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of p-phenylenediamines with a cyclic diaza group substituted by a cationic radical, and their use for dyeing keratinic fibers)

L52 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:794536 HCAPLUS  
 DOCUMENT NUMBER: 141:282418  
 TITLE: Composition for dyeing of  
 keratinic fibers comprising  
 a cationic derivative of p-phenylenediamine  
 substituted by a diazacyclohexane or a  
 diazacycloheptane  
 INVENTOR(S): Genet, Alain; Sabelle, Stephane  
 PATENT ASSIGNEE(S): L'oreal, Fr.  
 SOURCE: Eur. Pat. Appl., 25 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
EP 1462091	A1	20040929	EP 2004-290711	2004

0316

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,  
 EE, HU, PL, SK, HR

FR 2852830	A1	20041001	FR 2003-3547	
				2003
				0324
JP 2004285069	A2	20041014	JP 2004-85681	
				2004
				0323
US 2004237216	A1	20041202	US 2004-807167	
				2004
				0324
PRIORITY APPLN. INFO.:			FR 2003-3547	A
				2003
				0324
			US 2003-506766P	P
				2003
				0930

OTHER SOURCE(S): MARPAT 141:282418

AB Compns. for **dyeing of keratinic fibers**

, e.g. hair, comprises an oxidation base, a cationic derivative of p-phenylenediamine substituted by a diazacyclohexane or a diazacycloheptane. 4-(4-Amino-phenyl)-1,1-dimethyl-[1,4]diazepan-1-ium, chloride, dihydrochloride (I) was prepared by hydrogenation of 1,1-dimethyl-4-(4-nitrophenyl)[1,4]diazepan-1-ium chloride in presence of Pd/C. A hair dye contained I 10-3, 2-(2,4-diamino-phenoxy)ethanol dihydrochloride 10-3, excipients and water q.s. 100 g.

IT 760975-61-9 760975-63-1 760975-66-4

760975-68-6 760975-70-0 760975-72-2

760975-74-4 760975-76-6 760975-78-8

760975-80-2 760975-82-4 760975-83-5

760975-84-6 760975-85-7 760975-86-8

760975-87-9 760975-88-0 760975-89-1

760975-90-4 760975-91-5 760975-92-6

760975-93-7 760975-94-8 760975-95-9

760975-96-0 760975-97-1 760975-98-2

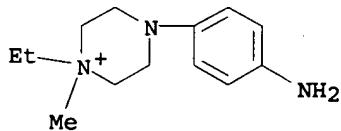
760975-99-3

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(composition for **dyeing of keratinic fibers** comprising cationic derivative of phenylenediamine substituted by diazacyclohexane or diazacycloheptane)

RN 760975-61-9 HCAPLUS

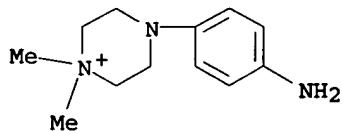
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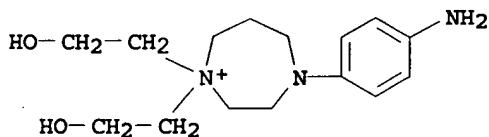
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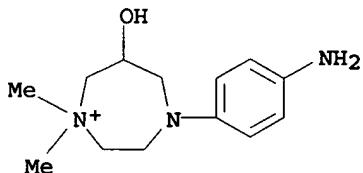
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● Cl<sup>-</sup>

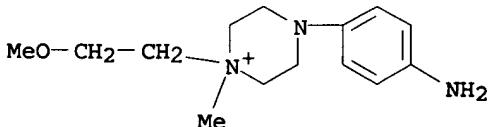
RN 760975-66-4 HCAPLUS  
 CN 1H-1,4-Diazepinium, 4-(4-aminophenyl)hexahydro-1,1-bis(2-hydroxyethyl)-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 760975-68-6 HCAPLUS  
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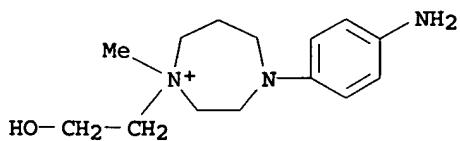
● Cl<sup>-</sup>

RN 760975-70-0 HCAPLUS  
 CN Piperazinium, 4-(4-aminophenyl)-1-(2-methoxyethyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

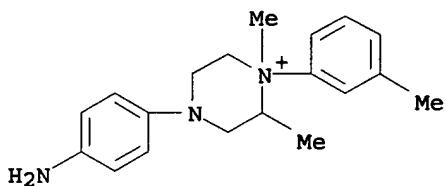
RN 760975-72-2 HCAPLUS

CN 1H-1,4-Diazepinium, 4-(4-aminophenyl)hexahydro-1-(2-hydroxyethyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)



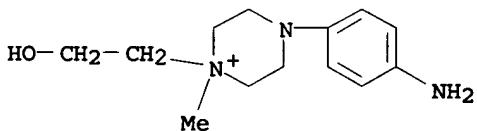
● Cl<sup>-</sup>

RN 760975-74-4 HCAPLUS  
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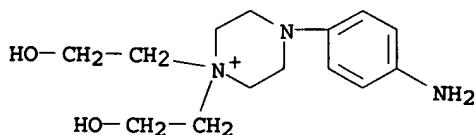
● Cl<sup>-</sup>

RN 760975-76-6 HCAPLUS  
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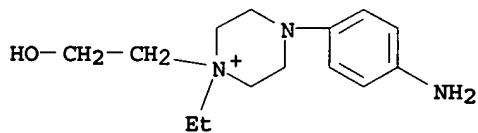
● Cl<sup>-</sup>

RN 760975-78-8 HCAPLUS  
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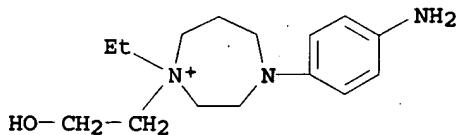
• Cl<sup>-</sup>

RN 760975-80-2 HCAPLUS  
CN Piperazinium, 4-(4-aminophenyl)-1-ethyl-1-(2-hydroxyethyl)-, chloride (9CI) (CA INDEX NAME)



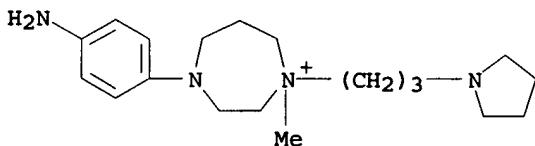
● Cl -

RN 760975-82-4 HCAPLUS  
CN 1H-1,4-Diazepinium, 4-(4-aminophenyl)-1-ethylhexahydro-1-(2-hydroxyethyl)-, chloride (9CI) (CA INDEX NAME)



Cl<sup>-</sup>

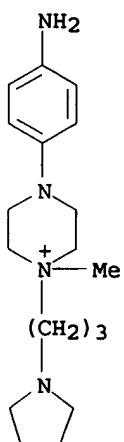
RN 760975-83-5 HCAPLUS  
CN 1H-1,4-Diazepinium, 4-(4-aminophenyl)hexahydro-1-methyl-1-[3-(1-pyrrolidinyl)propyl]-, chloride (9CI) (CA INDEX NAME)



●  $\text{Cl}^-$

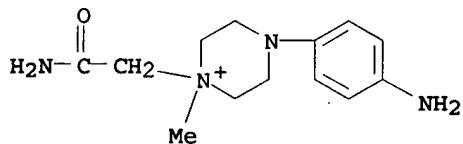
RN 760975-84-6 HCPLUS  
CN Piperazinium, 4-(4-aminophenyl)-1-methyl-1-[3-(1-

pyrrolidinyl)propyl]-, chloride (9CI) (CA INDEX NAME)



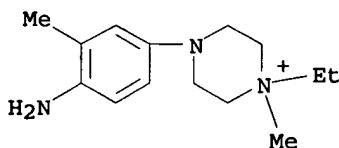
● Cl<sup>-</sup>

RN 760975-85-7 HCPLUS  
 CN Piperazinium, 1-(2-amino-2-oxoethyl)-4-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)



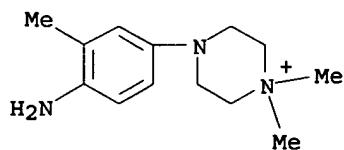
● Cl<sup>-</sup>

RN 760975-86-8 HCPLUS  
 CN Piperazinium, 4-(4-amino-3-methylphenyl)-1-ethyl-1-methyl-, chloride (9CI) (CA INDEX NAME)



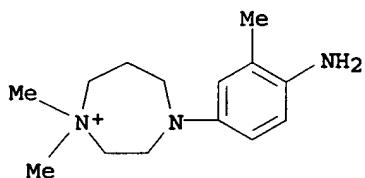
● Cl<sup>-</sup>

RN 760975-87-9 HCPLUS  
 CN Piperazinium, 4-(4-amino-3-methylphenyl)-1,1-dimethyl-, chloride (9CI) (CA INDEX NAME)



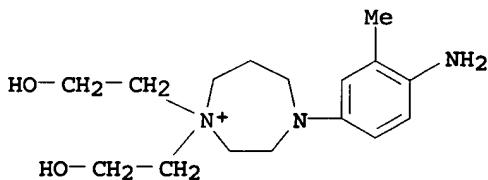
● Cl -

RN 760975-88-0 HCAPLUS  
 CN 1H-1,4-Diazepinium, 4-(4-amino-3-methylphenyl)hexahydro-1,1-dimethyl-, chloride (9CI) (CA INDEX NAME)



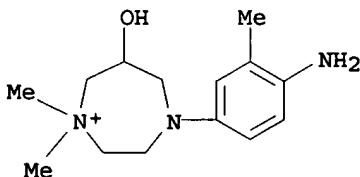
● Cl -

RN 760975-89-1 HCAPLUS  
 CN 1H-1,4-Diazepinium, 4-(4-amino-3-methylphenyl)hexahydro-1,1-bis(2-hydroxyethyl)-, chloride (9CI) (CA INDEX NAME)



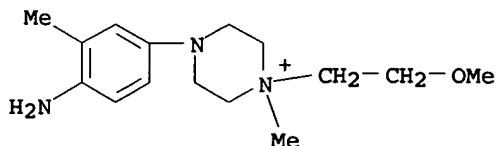
● Cl -

RN 760975-90-4 HCAPLUS  
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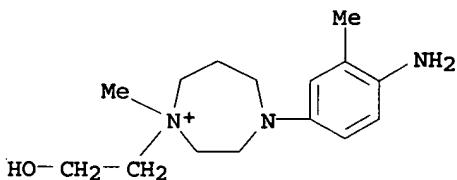


● Cl -

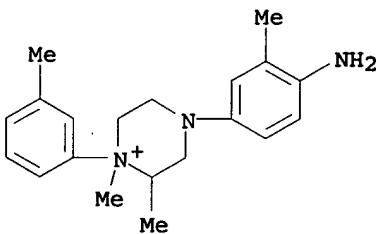
RN 760975-91-5 HCAPLUS  
 CN Piperazinium, 4-(4-amino-3-methylphenyl)-1-(2-methoxyethyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

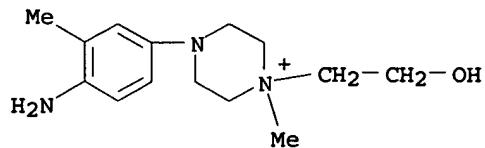
RN 760975-92-6 HCAPLUS  
 CN 1H-1,4-Diazepinium, 4-(4-amino-3-methylphenyl)hexahydro-1-(2-hydroxyethyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

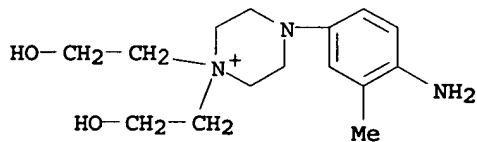
RN 760975-93-7 HCAPLUS  
 CN Piperazinium, 4-(4-amino-3-methylphenyl)-1,2-dimethyl-1-(3-methylphenyl)-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

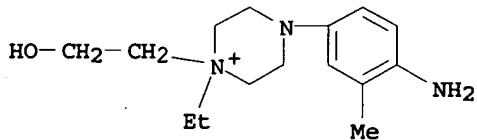
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● Cl<sup>-</sup>

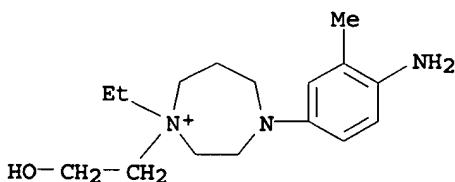
RN 760975-95-9 HCAPLUS  
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● Cl<sup>-</sup>

RN 760975-96-0 HCAPLUS  
 CN Piperazinium, 4-(4-amino-3-methylphenyl)-1-ethyl-1-(2-hydroxyethyl)-, chloride (9CI) (CA INDEX NAME)

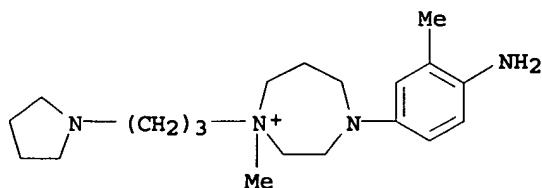
● Cl<sup>-</sup>

RN 760975-97-1 HCAPLUS  
 CN 1H-1,4-Diazepinium, 4-(4-amino-3-methylphenyl)-1-ethylhexahydro-1-(2-hydroxyethyl)-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

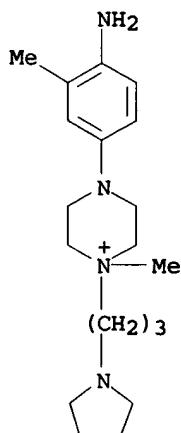
RN 760975-98-2 HCPLUS

CN 1H-1,4-Diazepinium, 4-(4-amino-3-methylphenyl)hexahydro-1-methyl-1-[3-(1-pyrrolidinyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 760975-99-3 HCPLUS

CN Piperazinium, 4-(4-amino-3-methylphenyl)-1-methyl-1-[3-(1-pyrrolidinyl)propyl]-, chloride (9CI) (CA INDEX NAME)

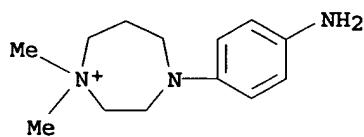
● Cl<sup>-</sup>

IT 760975-43-7P 760975-49-3P 760975-54-0P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (composition for dyeing of keratinic fibers comprising cationic derivative of phenylenediamine substituted by diazacyclohexane or diazacycloheptane)

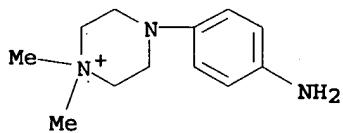
RN 760975-43-7 HCPLUS

CN 1H-1,4-Diazepinium, 4-(4-aminophenyl)hexahydro-1,1-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 760975-49-3 HCAPLUS

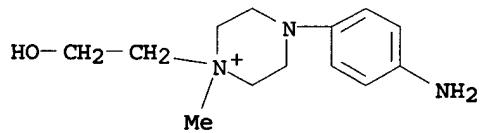
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● Cl<sup>-</sup>

● 2 HCl

RN 760975-54-0 HCAPLUS

CN Piperazinium, 4-(4-aminophenyl)-1-(2-hydroxyethyl)-1-methyl-, chloride, dihydrochloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

● 2 HCl

IC ICM A61K007-13

ICS C07D243-08; C07D295-12

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 25

ST hair dye phenylenediamine diazacyclohexane diazacycloheptane deriv

IT 760975-61-9 760975-63-1 760975-66-4

760975-68-6 760975-70-0 760975-72-2

760975-74-4 760975-76-6 760975-78-8

760975-80-2 760975-82-4 760975-83-5

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 760975-96-0 760975-97-1 760975-98-2  
 760975-99-3

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (composition for dyeing of keratinic  
 fibers comprising cationic derivative of phenylenediamine  
 substituted by diazacyclohexane or diazacycloheptane)

IT 760975-43-7P 760975-49-3P 760975-54-0P  
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (composition for dyeing of keratinic  
 fibers comprising cationic derivative of phenylenediamine  
 substituted by diazacyclohexane or diazacycloheptane)

IT 77-78-1, Methyl sulfate 5521-38-0 16155-03-6 223786-22-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (composition for dyeing of keratinic  
 fibers comprising cationic derivative of phenylenediamine  
 substituted by diazacyclohexane or diazacycloheptane)

IT 760975-45-9P 760975-48-2P 760975-51-7P 760975-52-8P  
 760975-57-3P 760975-59-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP  
 (Preparation); RACT (Reactant or reagent)  
 (composition for dyeing of keratinic  
 fibers comprising cationic derivative of phenylenediamine  
 substituted by diazacyclohexane or diazacycloheptane)

L52 ANSWER 4 OF 5 HCPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:133249 HCPLUS

DOCUMENT NUMBER: 138:171819

TITLE: Composition for dyeing  
 keratinous fibers containing  
 a p-phenylenediamine substituted by a  
 diazacycloheptane radical

INVENTOR(S): Sabelle, Stephane; Terranova, Eric

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: PCT Int. Appl., 41 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003014093	A1	20030220	WO 2002-FR2822	2002 0807

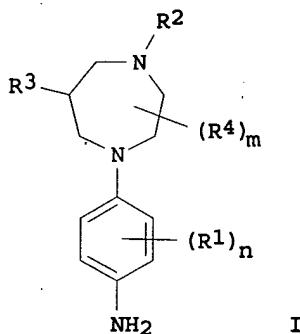
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 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
 MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG,  
 SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,  
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT,  
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 IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM,  
 GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

FR 2828488	A1	20030214	FR 2001-10597	2001 0808
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FR 2828488	B1	20050610		
EP 1417184	A1	20040512	EP 2002-772490	

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JP 2005504046	T2	20050210	JP 2003-519043		
				2002 0807	
US 2005102769	A1	20050519	US 2003-485855		
				2002 0807	
PRIORITY APPLN. INFO.:			FR 2001-10597	A	
				2001 0808	
				WO 2002-FR2822	W
				2002 0807	
OTHER SOURCE(S): GI		MARPAT 138:171819			



AB The invention concerns a composition for oxidation **dyeing** of **keratinous fibers**, in particular human hair, comprising an oxidation base I [R1 = halo, peroxide-, diazo-, NO2-, and NO-free (halo-substituted) C1-6 (cyclo) alkyl, optionally containing  $\geq 1$  of O, N, S, or SO2; n = 0-4; R2 = H, (substituted) C4-7 alkyl, alkylcarbonyl, alkoxy carbonyl, mono- or dialkylcarbamoyl, carbamoyl, or R6R7NC:NR5; R5-7 = H, C1-4 alkyl or hydroxyalkyl; R3 = H, (unsatd.) alkyl, OH, hydroxyalkyl, alkoxy, alkoxyalkyl, alkylcarbonyl, hydroxyalkoxyalkyl, amino, mono- or dialkylamino, aminoalkyl, hydroxy(amino)alkyl, carboxy, carbamoyl, carbamoylalkyl, alkoxy carbonyl, or mono- or dialkylaminocarbonyl; R4 = (unsatd.) alkyl, hydroxyalkyl, alkoxyalkyl, alkylcarbonyl, hydroxyalkoxyalkyl, aminoalkyl, hydroxy(amino)alkyl, carboxy, carboxyalkyl, carbamoyl, carbamoylalkyl, alkoxy carbonyl, or mono- or dialkylaminocarbonyl; m = 0-4] or their salts. The invention also concerns the method for **dyeing keratinous fibers** using said composition and the novel compds. mentioned above. Thus, I (R1, R3, R4 = H, R2 = Me) 2HCl was manufactured by reaction of 4-fluoronitrobenzene 5 h with 1-methyl[1,4]diazepane in water containing KCO3 at 100, reduction of the intermediate in the presence of Pd/C and treatment of the reaction solution with HCl.

IT 219132-82-8P, 1-Methyl-4-(4-aminophenyl)[1,4]diazepane  
497249-19-1P, 1-Methyl-4-(4-aminophenyl)[1,4]diazepane dihydrochloride 497249-23-7P 497249-27-1P

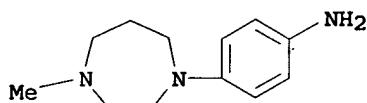
497249-28-2P, 4-(4-Aminophenyl)-1-methylcarbonyl[1,4]diazepane 497249-29-3P,  
 4-(4-Aminophenyl)[1,4]diazepane-1-carboximidamide  
 497249-30-6P, 4-(4-Aminophenyl)-N,N-dimethyl[1,4]diazepane-1-carboximidamide 497249-31-7P, 1-(4-Aminophenyl)-6-hydroxy-4-methyl[1,4]diazepane 497249-32-8P,  
 6-Amino-1-(4-aminophenyl)-4-methyl[1,4]diazepane  
 497249-33-9P, 1-(4-Aminophenyl)-6-hydroxy-4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepane 497249-34-0P,  
 6-Amino-1-(4-Aminophenyl)-4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepane 497249-35-1P,  
 1-(4-Aminophenyl)-6-hydroxy-4-(2-hydroxyethyl)[1,4]diazepane  
 497249-36-2P, 6-Amino-1-(4-Aminophenyl)-4-(2-hydroxyethyl)[1,4]diazepane 497249-37-3P,  
 1-(4-Aminophenyl)-4-(2-hydroxyethyl)-6-(hydroxymethyl)[1,4]diazepane 497249-38-4P,  
 2-Methyl-4-(4-methyl[1,4]diazepan-1-yl)phenylamine  
 497249-39-5P, 2-Methyl-4-[4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepan-1-yl]phenylamine 497249-40-8P,  
 1-(4-Amino-3-methylphenyl)-4-(2-hydroxyethyl)[1,4]diazepane  
 497249-41-9P, 1-(4-Amino-3-methylphenyl)-4-(methylcarbonyl)[1,4]diazepane 497249-42-0P,  
 4-(4-Amino-3-methylphenyl)[1,4]diazepane-1-carboximidamide  
 497249-43-1P, 4-(4-Amino-3-methylphenyl)-N,N-dimethyl[1,4]diazepane-1-carboximidamide 497249-44-2P,  
 1-(4-Amino-3-methylphenyl)-6-hydroxy-4-methyl[1,4]diazepane  
 497249-45-3P, 6-Amino-1-(4-amino-3-methylphenyl)-4-methyl[1,4]diazepane 497249-46-4P, 1-(4-Amino-3-methylphenyl)-6-hydroxy-4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepane 497249-47-5P,  
 6-Amino-1-(4-amino-3-methylphenyl)-4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepane 497249-48-6P,  
 1-(4-Amino-3-methylphenyl)-6-hydroxy-4-(2-hydroxyethyl)[1,4]diazepane 497249-49-7P,  
 6-Amino-1-(4-amino-3-methylphenyl)-4-(2-hydroxyethyl)[1,4]diazepane 497249-50-0P  
 497249-52-2P 497249-53-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(compns. containing p-phenylenediamines substituted by diazacycloheptane radicals for dyeing hair)

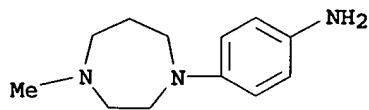
RN 219132-82-8 HCPLUS

CN Benzenamine, 4-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)- (9CI) (CA INDEX NAME)



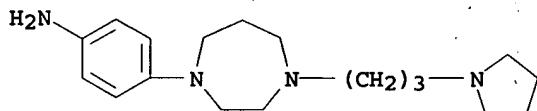
RN 497249-19-1 HCPLUS

CN Benzenamine, 4-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-, dihydrochloride (9CI) (CA INDEX NAME)



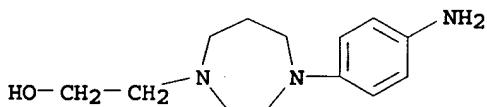
● 2 HCl

RN 497249-23-7 HCAPLUS  
CN Benzenamine, 4- [hexahydro-4- [3-(1-pyrrolidinyl)propyl]-1H-1,4-diazepin-1-yl] -, trihydrochloride (9CI) (CA INDEX NAME)



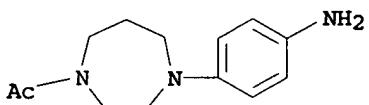
● 3 HCl

RN 497249-27-1 HCAPLUS  
CN 1H-1,4-Diazepine-1-ethanol, 4-(4-aminophenyl)hexahydro-,  
dihydrochloride (9CI) (CA INDEX NAME)

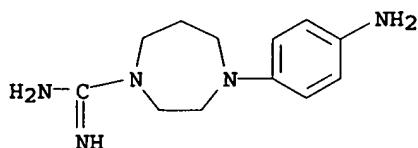


• 2 HCl

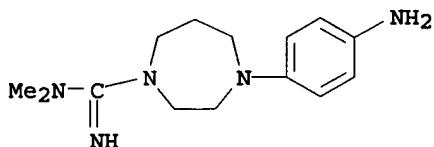
RN 497249-28-2 HCAPLUS  
CN 1H-1,4-Diazepine, 1-acetyl-4-(4-aminophenyl)hexahydro- (9CI) (CA  
INDEX NAME)



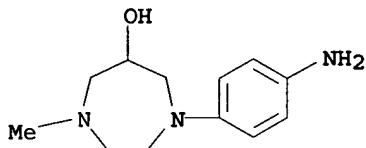
RN 497249-29-3 HCPLUS  
CN 1H-1,4-Diazepine-1-carboximidamide, 4-(4-aminophenyl)hexahydro-  
(9CI) (CA INDEX NAME)



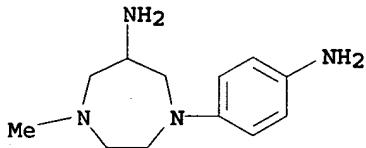
RN 497249-30-6 HCAPLUS  
 CN 1H-1,4-Diazepine-1-carboximidamide, 4-(4-aminophenyl)hexahydro-N,N-dimethyl- (9CI) (CA INDEX NAME)



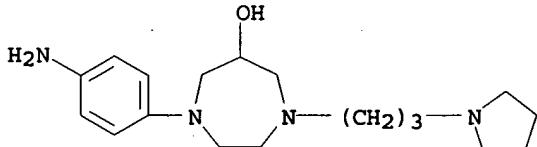
RN 497249-31-7 HCAPLUS  
 CN 1H-1,4-Diazepin-6-ol, 1-(4-aminophenyl)hexahydro-4-methyl- (9CI) (CA INDEX NAME)



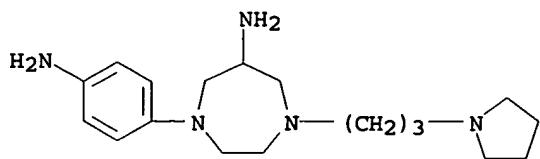
RN 497249-32-8 HCAPLUS  
 CN 1H-1,4-Diazepin-6-amine, 1-(4-aminophenyl)hexahydro-4-methyl- (9CI) (CA INDEX NAME)



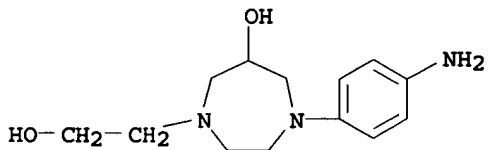
RN 497249-33-9 HCAPLUS  
 CN 1H-1,4-Diazepin-6-ol, 1-(4-aminophenyl)hexahydro-4-[3-(1-pyrrolidinyl)propyl]- (9CI) (CA INDEX NAME)



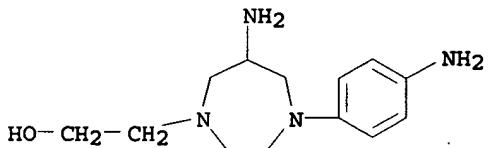
RN 497249-34-0 HCAPLUS  
 CN 1H-1,4-Diazepin-6-amine, 1-(4-aminophenyl)hexahydro-4-[3-(1-pyrrolidinyl)propyl]- (9CI) (CA INDEX NAME)



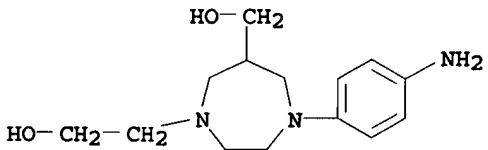
RN 497249-35-1 HCAPLUS  
 CN 1H-1,4-Diazepine-1-ethanol, 4-(4-aminophenyl)hexahydro-6-hydroxy- (9CI) (CA INDEX NAME)



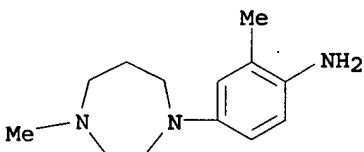
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 CN 1H-1,4-Diazepine-1-ethanol, 6-amino-4-(4-aminophenyl)hexahydro- (9CI) (CA INDEX NAME)



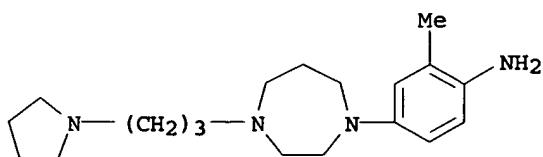
RN 497249-37-3 HCAPLUS  
 CN 1H-1,4-Diazepine-1-ethanol, 4-(4-aminophenyl)hexahydro-6-(hydroxymethyl)- (9CI) (CA INDEX NAME)



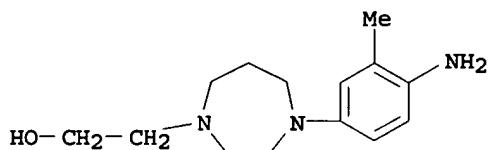
RN 497249-38-4 HCAPLUS  
 CN Benzenamine, 4-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-2-methyl- (9CI) (CA INDEX NAME)



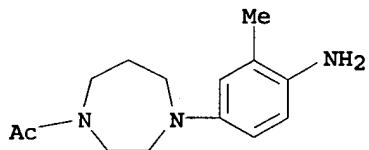
RN 497249-39-5 HCAPLUS  
 CN Benzenamine, 4-[hexahydro-4-[3-(1-pyrrolidinyl)propyl]-1H-1,4-diazepin-1-yl]-2-methyl- (9CI) (CA INDEX NAME)



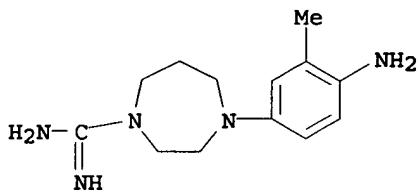
RN 497249-40-8 HCAPLUS  
 CN 1H-1,4-Diazepine-1-ethanol, 4-(4-amino-3-methylphenyl)hexahydro- (9CI) (CA INDEX NAME)



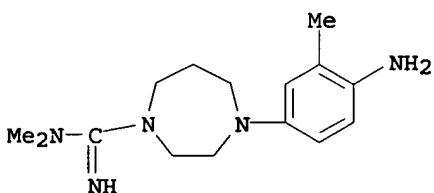
RN 497249-41-9 HCAPLUS  
 CN 1H-1,4-Diazepine, 1-acetyl-4-(4-amino-3-methylphenyl)hexahydro- (9CI) (CA INDEX NAME)



RN 497249-42-0 HCAPLUS  
 CN 1H-1,4-Diazepine-1-carboximidamide, 4-(4-amino-3-methylphenyl)hexahydro- (9CI) (CA INDEX NAME)

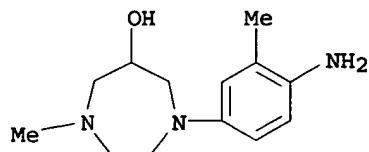


RN 497249-43-1 HCAPLUS  
 CN 1H-1,4-Diazepine-1-carboximidamide, 4-(4-amino-3-methylphenyl)hexahydro-N,N-dimethyl- (9CI) (CA INDEX NAME)

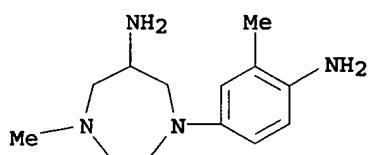


RN 497249-44-2 HCAPLUS

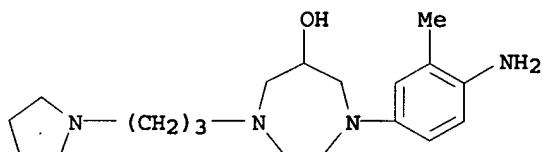
CN 1H-1,4-Diazepin-6-ol, 1-(4-amino-3-methylphenyl)hexahydro-4-methyl-  
(9CI) (CA INDEX NAME)



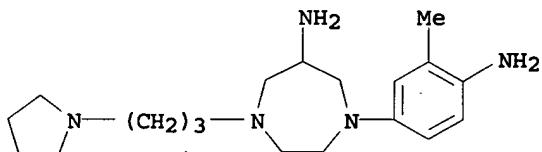
RN 497249-45-3 HCAPLUS  
CN 1H-1,4-Diazepin-6-amine, 1-(4-amino-3-methylphenyl)hexahydro-4-methyl- (9CI) (CA INDEX NAME)



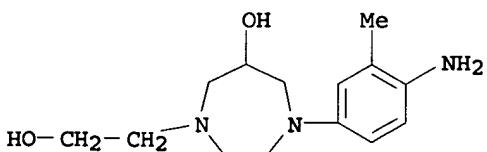
RN 497249-46-4 HCAPLUS  
CN 1H-1,4-Diazepin-6-ol, 1-(4-amino-3-methylphenyl)hexahydro-4-[3-(1-pyrrolidinyl)propyl]- (9CI) (CA INDEX NAME)



RN 497249-47-5 HCAPLUS  
CN 1H-1,4-Diazepin-6-amine, 1-(4-amino-3-methylphenyl)hexahydro-4-[3-(1-pyrrolidinyl)propyl]- (9CI) (CA INDEX NAME)

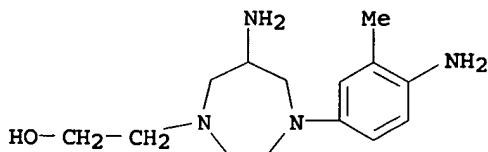


RN 497249-48-6 HCAPLUS  
CN 1H-1,4-Diazepine-1-ethanol, 4-(4-amino-3-methylphenyl)hexahydro-6-hydroxy- (9CI) (CA INDEX NAME)



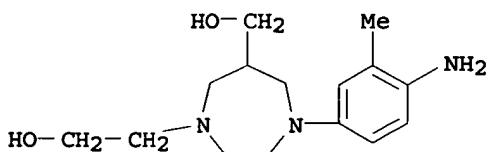
RN 497249-49-7 HCAPLUS  
CN 1H-1,4-Diazepine-1-ethanol, 6-amino-4-(4-amino-3-

methylphenyl)hexahydro- (9CI) (CA INDEX NAME)



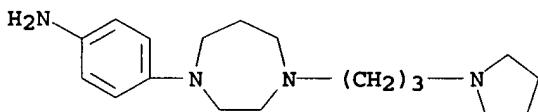
RN 497249-50-0 HCPLUS

CN 1H-1,4-Diazepine-1-ethanol, 4-(4-amino-3-methylphenyl)hexahydro-6-(hydroxymethyl)- (9CI) (CA INDEX NAME)



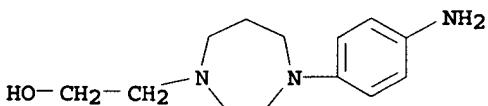
RN 497249-52-2 HCPLUS

CN Benzenamine, 4-[hexahydro-4-[3-(1-pyrrolidinyl)propyl]-1H-1,4-diazepin-1-yl]- (9CI) (CA INDEX NAME)



RN 497249-53-3 HCPLUS

CN 1H-1,4-Diazepine-1-ethanol, 4-(4-aminophenyl)hexahydro- (9CI) (CA INDEX NAME)



IC ICM C07D243-08

ICS A61K007-13

CC 41-5 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitzers)

Section cross-reference(s): 28, 62

ST aminophenyldiazapane deriv hair dye;  
methyldiazepanylphenylamine dye manuf hair

IT Hair preparations  
(dyes; compns. containing p-phenylenediamines substituted by diazacycloheptane radicals for dyeing hair  
)

IT 219132-82-8P, 1-Methyl-4-(4-aminophenyl)[1,4]diazepane  
497249-19-1P, 1-Methyl-4-(4-aminophenyl)[1,4]diazepane dihydrochloride 497249-21-5P, 4-(4-Amino-3-methylphenyl)[1,4]diazepane dihydrochloride 497249-23-7P  
497249-25-9P, 1-(4-Aminophenyl)[1,4]diazepane dihydrochloride  
497249-27-1P 497249-28-2P, 4-(4-Aminophenyl)-1-methylcarbonyl[1,4]diazepane 497249-29-3P, 4-(4-Aminophenyl)[1,4]diazepane-1-carboximidamide

497249-30-6P, 4-(4-Aminophenyl)-N,N-dimethyl[1,4]diazepane-1-carboximidamide 497249-31-7P, 1-(4-Aminophenyl)-6-hydroxy-4-methyl[1,4]diazepane 497249-32-8P, 6-Amino-1-(4-aminophenyl)-4-methyl[1,4]diazepane 497249-33-9P, 1-(4-Aminophenyl)-6-hydroxy-4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepane 497249-34-0P, 6-Amino-1-(4-Aminophenyl)-4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepane 497249-35-1P, 1-(4-Aminophenyl)-6-hydroxy-4-(2-hydroxyethyl)[1,4]diazepane 497249-36-2P, 6-Amino-1-(4-Aminophenyl)-4-(2-hydroxyethyl)[1,4]diazepane 497249-37-3P, 1-(4-Aminophenyl)-4-(2-hydroxyethyl)-6-(hydroxymethyl)[1,4]diazepane 497249-38-4P, 2-Methyl-4-(4-methyl[1,4]diazepan-1-yl)phenylamine 497249-39-5P, 2-Methyl-4-[4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepan-1-yl]phenylamine 497249-40-8P, 1-(4-Amino-3-methylphenyl)-4-(2-hydroxyethyl)[1,4]diazepane 497249-41-9P, 1-(4-Amino-3-methylphenyl)-4-(methylcarbonyl)[1,4]diazepane 497249-42-0P, 4-(4-Amino-3-methylphenyl)[1,4]diazepane-1-carboximidamide 497249-43-1P, 4-(4-Amino-3-methylphenyl)-N,N-dimethyl[1,4]diazepane-1-carboximidamide 497249-44-2P, 1-(4-Amino-3-methylphenyl)-6-hydroxy-4-methyl[1,4]diazepane 497249-45-3P, 6-Amino-1-(4-amino-3-methylphenyl)-4-methyl[1,4]diazepane 497249-46-4P, 1-(4-Amino-3-methylphenyl)-6-hydroxy-4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepane 497249-47-5P, 6-Amino-1-(4-amino-3-methylphenyl)-4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepane 497249-48-6P, 1-(4-Amino-3-methylphenyl)-6-hydroxy-4-(2-hydroxyethyl)[1,4]diazepane 497249-49-7P, 6-Amino-1-(4-amino-3-methylphenyl)-4-(2-hydroxyethyl)[1,4]diazepane 497249-50-0P 497249-51-1P, 1-(4-Aminophenyl)[1,4]diazepane 497249-52-2P 497249-53-3P 497249-54-4P, 4-(4-Amino-3-methylphenyl)[1,4]diazepane

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(compns. containing p-phenylenediamines substituted by diazacycloheptane radicals for dyeing hair)

IT 108-45-2, m-Phenylenediamine, uses 108-46-3, m-Dihydroxybenzene, uses 591-27-5, m-Aminophenol 2835-95-2, 5-Amino-2-methylphenol 66422-95-5, 2,4-Diamino-1-(2-Hydroxyethoxy)benzene dihydrochloride RL: TEM (Technical or engineered material use); USES (Uses) (coupling agent; compns. containing p-phenylenediamines substituted by diazacycloheptane radicals for dyeing hair )

IT 220220-20-2P, 4-(3-Methyl-4-nitrophenyl)[1,4]diazepane 223786-22-9P, 1-Methyl-4-(4-nitrophenyl)[1,4]diazepane 497249-20-4P 497249-24-8P, 1-Benzyl-4-(4-nitrophenyl)[1,4]diazepane 497249-26-0P, 1-(2-Hydroxyethyl)-4-(4-nitrophenyl)[1,4]diazepane RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (dye precursor; compns. containing p-phenylenediamines substituted by diazacycloheptane radicals for dyeing hair)

IT 497249-22-6P, 1-(4-Nitrophenyl)-4-[3-(pyrrolidin-1-yl)propyl][1,4]diazepane RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (dye precursor; compns. containing p-phenylenediamines substituted by diazacycloheptane radicals for dyeing hair)

IT 350-46-9, 4-Fluoronitrobenzene 446-33-3, 4-Fluoro-2-methylnitrobenzene 4318-37-0, 1-Methyl[1,4]diazepane

4410-12-2, 1-Benzylhomopiperazine 53427-65-9,  
 1-(2-Hydroxyethyl)homopiperazine 61903-11-5,  
 1-Acetyl[1,4]diazepane 199475-39-3, 1-[3-(Pyrrolidin-1-  
 yl)propyl]homopiperazine

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (dye precursor; compns. containing p-phenylenediamines  
 substituted by diazacycloheptane radicals for dyeing  
 hair)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L52 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:208250 HCAPLUS

DOCUMENT NUMBER: 134:252352

TITLE: Preparation of 3-aryl-2-  
 arylureidoalkylquinazolin-4-ones and related  
 compounds as mediators of hedgehog signaling  
 pathways.

INVENTOR(S): Baxter, Anthony David; Boyd, Edward Andrew;  
 Guichert, Oivin M.; Price, Stephen; Rubin, Lee  
 D.

PATENT ASSIGNEE(S): Curis, Inc., USA

SOURCE: PCT Int. Appl., 177 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001019800	A2	20010322	WO 2000-US25461	2000 0915
WO 2001019800	A3	20011206		
WO 2001019800	C2	20021003		
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EP 1216234	B1	20041229		
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US 6545005	B1	20030408	US 2000-663835	2000 0915
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EP 1516876	A1	20050323	EP 2004-28252	
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				2004 0929
PRIORITY APPLN. INFO.:				US 1999-154526P P
				1999 0916
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			US 1999-162899P P	1999 1101
			EP 2000-963551 A3	2000 0915
			US 2000-663835 A2	2000 0915
			WO 2000-US25461 W	2000 0915
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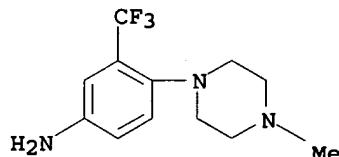
## OTHER SOURCE(S): MARPAT 134:252352

AB R1LX1Y1Z1LX2Y2Z2LR2 [R1, R2 = H, alkyl, (substituted) aryl, aralkyl, heteroaryl, heteroarylalkyl; L = null, alkyl, alkenyl, alkynyl, (CH<sub>2</sub>)<sub>n</sub>O(CH<sub>2</sub>)<sub>p</sub>, etc.; n, p = 0-10; X<sub>1</sub>, X<sub>2</sub> = NR<sub>8</sub>, O, S, Se, N:N, ON:CH, heterocyclyl, bond, etc.; Y<sub>1</sub>, Y<sub>2</sub> = CO, CS, SO<sub>2</sub>, SO, C(:NCN), heteroaryl, bond, etc.; Z<sub>1</sub>, Z<sub>2</sub> = NR<sub>8</sub>, O, S, Se, N:N, ON:CH, heterocyclyl, bond, etc.; R<sub>8</sub> = H, alkyl, (substituted) aryl, aralkyl, heteroaryl, heteroaralkyl, etc.], were prepared. Thus, triphosgene in EtOAc was added to 4-nitro-3-trifluoromethylaniline in EtOAc followed by stirring and reflux. The mixture was concentrated, dissolved in CHCl<sub>3</sub>, and treated with 3-(4-fluorophenyl)-2-(1-methylaminoethyl)-4-oxo-3,4-dihydroquinazoline in CHCl<sub>3</sub> to give 97% 1-[1-[3-(4-fluorophenyl)-4-oxo-3,4-dihydroquinazolin-2-yl]ethyl]-3-(3-trifluoromethyl-4-nitrophenyl)-1-methylurea. The latter inhibited sonic hedgehog-induced Gli transcription activity with IC<sub>50</sub> < 5  $\mu$ M.

IT 330796-48-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of 3-aryl-2-arylureidoalkylquinazolin-4-ones and  
 related compds. as mediators of hedgehog signaling pathways)

RN 330796-48-0 HCPLUS

CN Benzenamine, 4-(4-methyl-1-piperazinyl)-3-(trifluoromethyl)- (9CI)  
 (CA INDEX NAME)

IC ICM C07D239-00

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1, 62

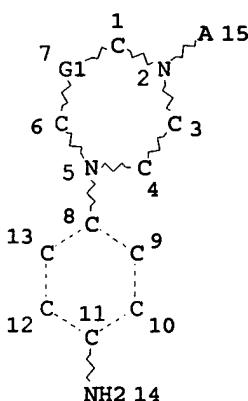
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 330796-47-9 330796-48-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 3-aryl-2-arylureidoalkylquinazolin-4-ones and  
 related compds. as mediators of hedgehog signaling pathways)

=&gt; =&gt; d que stat 148

L7 STR



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NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

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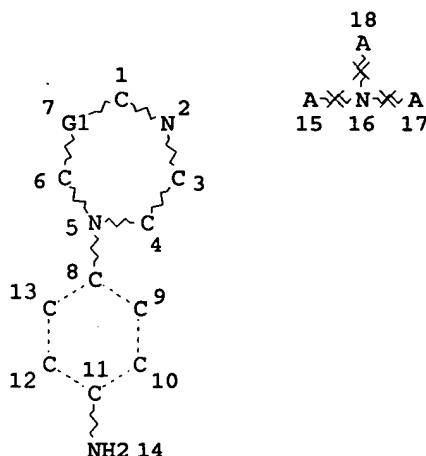
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L9 846 SEA FILE=REGISTRY SSS FUL L7

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STR



REP G1=(0-1) C

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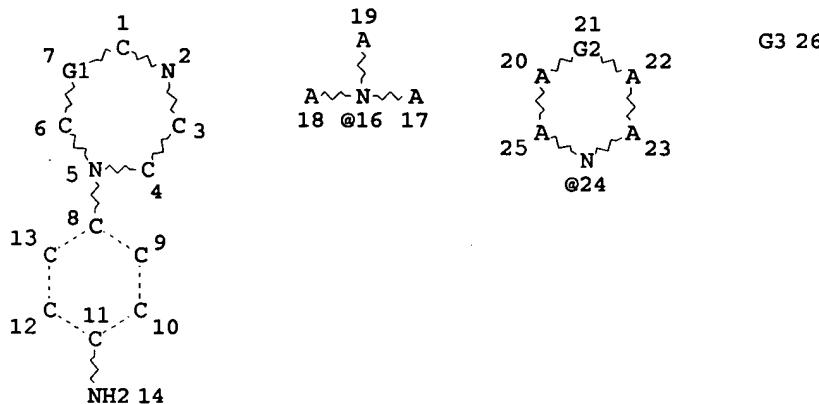
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L13 207 SEA FILE=REGISTRY SUB=L9 SSS FUL L11

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REP G2=(0-1) A

VAR G3=16/24

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RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

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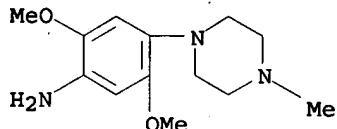
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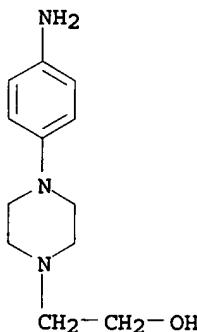
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L48 ANSWER 1 OF 6 CAOLD COPYRIGHT 2006 ACS on STN  
 AN CA64:12852g CAOLD  
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 PA General Aniline & Film Corp.  
 DT Patent  
 PATENT NO.    KIND                    DATE  
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 PI NL 6505812  
 BE 663606  
 FR 1441795  
 IT 5521-23-3    5521-24-4    5521-25-5    5521-26-6    5521-27-7  
 5521-28-8    5521-29-9    5521-38-0    5521-39-1  
 6826-94-4    17030-18-1    17069-23-7    17099-39-7    17099-43-3  
 17099-46-6    17099-47-7    94786-00-2    96279-22-0    97785-12-1  
 98001-18-4    98924-29-9  
 IT 5521-27-7    5521-39-1  
 RN 5521-27-7 CAOLD  
 CN Piperazine, 1-(4-amino-2,5-dimethoxyphenyl)-4-methyl-,  
 dihydrochloride (7CI, 8CI) (CA INDEX NAME)



●2 HCl

RN 5521-39-1 CAOLD  
 CN 1-Piperazineethanol, 4-(4-aminophenyl)- (9CI) (CA INDEX NAME)



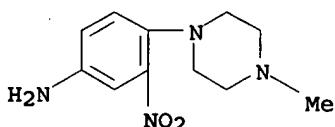
L48 ANSWER 2 OF 6 CAOLD COPYRIGHT 2006 ACS on STN  
 AN CA64:6534h CAOLD  
 TI preparative routes to tertiary amine-substituted nitroanilines  
 AU Ainsworth, D. P.; Suschitzky, H.  
 TI ylide methylation of aromatic nitro compds.  
 AU Traynelis, Vincent J.; McSweeney, J. V.  
 IT 81-20-9    83-41-0    83-42-1    881-03-8    1138-83-6  
 1890-33-1    3412-44-0    3487-44-3    4031-79-2    4031-80-5

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IT 5367-67-3

RN 5367-67-9 CAOLD

CN Piperazine, 1-(4-amino-2-nitrophenyl)-4-methyl- (7CI, 8CI) (CA INDEX NAME)



L48 ANSWER 3 OF 6 CAOLD COPYRIGHT 2006 ACS on STN  
AN CA62:11830e CAOLD  
TI 1,4-disubstituted piperazines  
AU Tomcufcik, Andrew S.; Fabio, P. F.; Hoffman, A. M.  
DT Patent  
TI piperazines (1,4-disubstituted)  
PA American Cyanamid Co.  
DT Patent

PATENT NO.                    KIND                    DATE

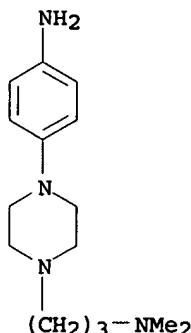
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NL 297170				
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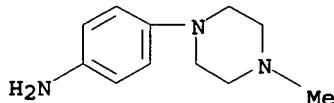
IT 790-27-2

RN 790-27-2 CAOLD

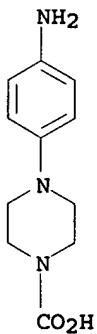
CN 1-Piperazinepropanamine, 4-(4-aminophenyl)-N,N-dimethyl- (9CI)  
(CA INDEX NAME)



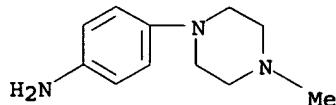
L48 ANSWER 4 OF 6 CAOLD COPYRIGHT 2006 ACS on STN  
 AN CA60:15868h CAOLD  
 TI synthesis of thiourea derivs. - (III) piperazinylthiocarbanilides  
 and arylthiocarbamoylpiperazines  
 AU Galstukhova, N. B.; Shchukina, M. N.  
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 34349-88-7 89169-35-7 89169-36-8 91643-97-9 91646-66-1  
 93023-56-4 94264-50-3 94438-24-1 94520-33-9  
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 IT 16153-81-4 91646-66-1 94520-33-9  
 RN 16153-81-4 CAOLD  
 CN Benzenamine, 4-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 91646-66-1 CAOLD  
 CN 1-Piperazinecarboxylic acid, 4-(p-aminophenyl)- (7CI) (CA INDEX  
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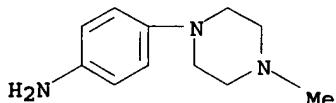


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 INDEX NAME)



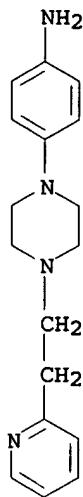
●x HCl

L48 ANSWER 5 OF 6 CAOLD COPYRIGHT 2006 ACS on STN  
 AN CA59:15271c CAOLD  
 TI ethylenimine-2-carbanilides and isomeric 3-pyridazolidones thereof  
 AU Wagner-Jauregg, Theodor; Zirngibl, L.  
 IT 3490-67-3 5369-34-6 10220-22-1 16153-81-4  
 16155-03-6 18606-63-8 27301-73-1 29425-96-5 35197-07-0  
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 RN 16153-81-4 CAOLD  
 CN Benzenamine, 4-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



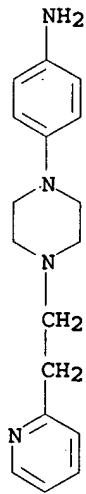
L48 ANSWER 6 OF 6 CAOLD COPYRIGHT 2006 ACS on STN  
 AN CA57:16634e CAOLD  
 TI fluor Rubin  
 AU Deuscher, Werner; Vilsmeier, W.; Riedel, G.  
 PA Badische Anilin- & Soda-Fabrik A.-G.  
 DT Patent  
 PATENT NO. KIND DATE  
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 PI BE 612092  
 DE 1149477  
 GB 1008467  
 IT 3965-85-3 3965-87-5 6640-47-7 34117-90-3 54940-73-7  
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 CN Piperazine, 1-(p-aminophenyl)-4-[2-(2-pyridyl)ethyl]- (7CI) (CA

INDEX NAME)



RN 94710-05-1 CAOLD

CN Piperazine, 1-(p-aminophenyl)-4-[2-(2-pyridyl)ethyl]-, trihydrochloride (7CI) (CA INDEX NAME)



●3 HCl

=&gt;